

AMENDMENTS TO THE CLAIMS

The claims in this listing will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Original) An oligonucleotide, which at least comprises, in a direction from the 5'-terminus to the 3'-terminus:

- (1) an antisense sequence of a target nucleic acid sequence;
- (2) a trimming sequence which is cleaved with base-specific RNase;
- (3) a sense sequence of a target nucleic acid sequence;
- (4) an antisense sequence of a promoter sequence;
- (5) a sequence that forms a loop; and
- (6) a sense sequence of a promoter sequence,

wherein the above-described antisense sequence and sense sequence of a promoter sequence form a double strand in a molecule via a hairpin structure, and when DNA is transcribed, a transcriptional product from the above-described antisense sequence and sense sequence of a target nucleic acid sequence forms a double strand in a molecule via the trimming sequence.

2. (Original) An oligonucleotide, which at least comprises, in a direction from the 5'-terminus to the 3'-terminus:

- (1) an antisense sequence of a target nucleic acid sequence;
- (2) a trimming sequence which is cleaved with base-specific RNase;

(3) a sense sequence of a target nucleic acid sequence; and

(4) an antisense sequence of a promoter sequence,

wherein, when DNA is transcribed, a transcriptional product from the above-described antisense sequence and sense sequence of a target nucleic acid sequence forms a double strand in a molecule via the trimming sequence.

3. (Original) The oligonucleotide according to claim 2 wherein at least a promoter sequence region is double-stranded.

4. (Original) A double-stranded DNA, which consists of the oligonucleotide of claim 2 and an oligonucleotide having a sequence complementary to said oligonucleotide.

5. (Previously Presented) The oligonucleotide according to claim 1 which has two bases AA at the 5'-terminus located upstream of the antisense sequence of a target nucleic acid sequence.

6. (Previously Presented) The oligonucleotide according to claim 1 wherein the trimming sequence which is cleaved with RNase is represented by 5'-C(D)_kCD-3' wherein D represents A, T, or G, and k represents an integer between 0 and 100, wherein (k + 1) number of D bases may be identical to or different from one another.

7. (Previously Presented) The oligonucleotide according to claim 1 wherein the trimming sequence which is cleaved with RNase is represented by 5'-CTATGCT-3'.

8. (Previously Presented) The oligonucleotide according to claim 1 wherein -CCC- exists between the sense sequence of a target nucleic acid sequence described in (3) and the antisense sequence of a promoter sequence described in (4).

9. (Previously Presented) The oligonucleotide according to claim 1 wherein the promoter sequence is a T7 class III promoter sequence.

10. (Currently Amended) The oligonucleotide according to claim 1 wherein the sequence that forms a loop described in (5) is a sequence comprising -GNA- wherein N represents A, T, C, or G.[[.]]

11. (Currently Amended) An oligonucleotide represented by 5'-AA-(the antisense sequence of a target nucleic acid sequence)-CTATGCT-(the sense sequence of a target nucleic acid sequence)-CCC-TATAGTGAGTCGTATTA-GCGAAGC-TAATACGACTCACTATA (SEQ ID NO: 4)-3'.

12. (Previously Presented) A method for producing shRNA, which comprises transcribing DNA, using the oligonucleotide or DNA of claim 1 as a template and using RNA polymerase.

13. (Original) The method for producing shRNA according to claim 12 wherein the transcription is carried out *in vitro*.

14. (Previously Presented) The method for producing shRNA according to claim 12 wherein T7 RNA polymerase is used as RNA polymerase.

15. (Previously Presented) shRNA produced by the method of claim 12.

16. (Previously Presented) A method for producing siRNA, which comprises treating the shRNA produced by the method of claim 12 with base-specific RNase.

17. (Previously Presented) A method for producing siRNA, which comprises transcribing DNA using the oligonucleotide of claim 1 as a template and using RNA polymerase, so as to produce shRNA, and then treating the shRNA with base-specific RNase.

18. (Previously Presented) A method for suppressing the expression of a gene containing a target nucleic acid sequence by RNAi, using the shRNA produced by the method of claim 12 .

19. (Previously Presented) A reagent kit for carrying out the method of claim 12 which comprises RNA polymerase and base-specific RNase.

20. (Previously Presented) A method for suppressing the expression of a gene containing a target nucleic acid sequence by RNAi, using the siRNA produced by the method of claim 16.